



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Adress: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,466	02/06/2004	Moon-jeong Choi	Q79174	6714
23373	7590	12/27/2007	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EL-ZOOLI, MARIA	
ART UNIT	PAPER NUMBER			
	4178			
MAIL DATE	DELIVERY MODE			
12/27/2007	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/772,466	Applicant(s) CHOI, MOON-JEONG
	Examiner MARIA EL-ZOOBI	Art Unit 4178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11/21/2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Response to Arguments

Applicant argues, "Edson fails to disclose a fax machine connected to the home network through a power switch and a telephone line."

In response, the Examiner respectfully disagrees with the Applicant because Applicant clearly misconstrues the references.

Edson clearly discloses a fax machine (Fig. 1, el. 33) connected to the home network (Fig. 1, el. 21 and 23) through a power switch (not shown but inherent. All fax machines must have a power switch) and a telephone line (Fig. 2, el. 19, 15; also see Col. 4, lines 25-30).

Applicant further argues, "neither Lee, Skladman nor Kimura disclose any fax machine connected to the home network through a power switch and a telephone line."

In response, the Examiner respectfully disagrees with the Applicant because Applicant again misconstrues the references. Lee clearly shows (Fig. 2, el. 110) a power line in which main board (Fig. 1, el. 10), inherently has a power-switch and a telephone line (see Fig. 1).

Skladman, in a similar art, also shows in Fig. 4 with a fax device (not shown) communicates with the interface 120 of the unified message server 64 through various communication network (Fig. 1, el.56-62), again Skladman fax device inherently has a power switch and a telephone line.

Kimura, a similar art, discloses an image data outputting apparatus Fig. 1, acts as fax device including an energy saving control unit bidirectional communicates with a telephone line (Col. 5, lines 45-56; Col. 6, lines 25-55).

Conclusion, the Examiner maintains the rejection.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edson (US 6,526,581) in view of Lee (US 2003/0078990) and in view of Skladman (US 2003/0026393) and in view of Kimura (US 6,091,515).

Regarding claim 1, Edson discloses, a fax service system in a home network (col. 8, lines 33-37, col. 15, lines 52-58).

a storage means for storing a fax data (Fig. 2 ,el. 107 and 111; col. 9, lines. 8-14)

a fax machine (col. 8, lines. 32-37) connected to the home network through a gateway (col. 7, lines 44 - 47) and a telephone line (Fig. 1, el. 21, Fig. 2, el. 19,15; col. 4, lines 25-30). It is noted that Edson's fax machine (Fig. 33, el. 33) is connected to the home network (Fig. 1, el. 21 and 23)through a power-switch; not shown but inherent that all fax machines must have a power switch)

a fax data processing unit receiving the fax data through the Internet Protocol destined for the fax machine which is connected to the home network through the gateway and the telephone line, and storing the fax data in the storage means (Fig. 2, el. 105 , 107 and 111; col. 9, lines 8-14).

Edson does not disclose that the gateway acts as a fax server. Lee discloses a home gateway that is able to function as a fax server to send /receive fax data (paragraph. 007). Therefore, it would be have been obvious to a one with ordinary skill in the art at the time of the invention to modify Edson fax service system in view of Lee so Edson's gateway act as a fax server that further can control household appliances without requiring additional wiring (paragraph 0006 and 0007)

Edson in view of Lee disclose a home gateway for collecting a device information and a control information from at least one information device connected to the home network and providing the device information and the control information upon a request for purposes of unified messages (0003 and 0021)

Edson in view of Lee do not disclose a middleware.

Skladman discloses, a middleware server (Fig. 3a, el. 34) for collecting a device information and control information to the home network (paragraph 0030, 0031) and providing the device information and the control information upon a request (paragraph 0056).

Therefore, it would be have been obvious to one with ordinary skill in the art at the time of the invention to use the middleware server as taught by Skladman onto the fax service system which have been taught by Edson in view of Lee to provide communication between the appliances through the middleware server.

Edson in view of Lee and further in view of Skladman disclose a the fax data processing unit transmits a control command to the gateway through the middleware server.

Edson in view of Lee and further in view of Skladman don't disclose transmitting the control command to change the fax machine into an ON state when the fax machine is detected in an OFF state according to an information of the fax machine to perform the fax function accordingly.

Kimura discloses, a control command is transmitted to the fax device according to its state of ON/OFF (Fig.1 ,el. 5,6,7,13 and col. 6, lines. 28-45; col. 7, lines. 13-37).

Therefore, it would be have been obvious to one with ordinary skill in the art at the time of the invention to modify Edson in view of Lee and Skladman using the function of turn the fax machine ON/OFF based on its state , as taught by Kimura in order to save power.

Regarding claim 2, Edson in view of Lee, Skladman and Kimura further disclose the fax data processing unit requests the middleware server to display a message informing a receipt of the fax data on a display connected to the home network, when the fax data is received from an external network.(Skladman: paragraph. 0043-0044 and paragraph 0052-0054).

Regarding claim 3, Edson in view of Lee, Skladman and Kimura further disclose fax data processing unit transmits a control command to the power switch through the middleware server to change the fax machine into the off state when the fax data is completely transmitted to the fax machine(as discussed in claim 1).

Regarding claim 4, Edson (Fig.1, el. 312 and el. 323) in view of Lee and further in view of Skladman and further in view of Kimura disclose the power switch is a power line communication module in the fax machine.

Regarding claim 5, Edson in view of Lee ,Skladman and Kimura further disclose the power switch is an adaptor which connects a power plug of the fax

machine with a jack for controlling a supply of power to the fax machine to change a fax machine state comprising the on state and the off state, according to the control command (reads on Kimura's Fig. 1 in which the system control unit 5 control the ON/OFF state of the fax device by supplying or not supplying power to the device (col. 7,lines. 10-37 and 54 - 67).

Regarding claim 6, this claim differs from claim 1 only in that claim 6 is method whereas claim 1 is a system. The additional limitation providing a respective identifier (ID) to each of information devices connected to the home network is further teach by Skladman (paragraph. 0031- 0032; for ex. IP address or each device has it's own unique MAC address).

Regarding claim 7, Edson in view of Lee, Skladman and Kimura disclose, the step of displaying a message informing a receipt of the fax data on a display which is connected to the home network, when the fax data is received from an external network (see the discussion of claim 2).

Regarding claim 8, Edson in view of Lee and further in view of Skladman and further in view of Kimura disclose, the step of transmitting a control commands to the power switch through the middleware server to change the fax machine into the off state (see the discussion of claim 1).

Regarding claim 9, Edson in view of Lee, Skladman and Kimura disclose,

Art Unit: 4178

power switch is a power line communication module in the fax machine (see the discussion of claim 4).

Regarding claim 10, Edson in view of Le, Skladman and Kimura disclose, the power switch is an adaptor which connects a power plug of the fax machine with a jack for controlling a supply of power to the fax machine to change a fax machine state comprising the on state and the off state, according to the control command (see discussion of claim 5).

Regarding claim 11, Claim 11 is rejected in light of the combine references as previously noted. Figure 2 of Edson illustrates a "first interface" connecting the gateway in a home network to external network (Fig. 2, el. 117-119 and 115) and (col. 8, lines 33-37, col 15, lines 52-58), a "second interface" (Fig. 2, el. 121), a "storage means" (Fig. 2, el. 107) and "control unit" reads on Edson (Fig. 2, el. 105). Edson, however, is silent regarding the 'first interface' comprising a 'middleware server' as claimed.

Lee discloses a home gateway that is able to function as a fax server to send /receive fax data (paragraph. 007).

Skladman discloses, a middleware server (Fig. 3a, el. 34) for collecting a device information and control information to the home network (paragraph 0030 and 0031) and providing the device information and the control information upon a request (paragraph 0056).

Therefore, it would be have been obvious to one with ordinary skill in the art at the

time of the invention to use the middleware server as taught by Skladman onto the fax service system which have been taught by Edson in view of Lee to provide communication between the appliances through the middleware server.

Edson in view of Lee and further in view of Skladman do not disclose that the 'control unit' transmitting the control command to change the fax machine into an ON state when the fax machine is detected in an OFF state according to an information of the fax machine to perform the fax function accordingly.

Kimura discloses, a control command is transmitted to the fax device according to its state of ON/OFF (Fig. 1,el. 5, 6, 7, 13 and col. 6, lines 28-45; col 7, lines 13-37).

Therefore, it would be obvious to one with ordinary skill in the art at the time of the invention to modify the Edson "control unit" using the function of turn the fax machine ON/OFF based on its state , as taught by Kimura in order to save power.

Regarding claim 12, Edson in view of Lee, Skladman and Kimura disclose, the control unit requests the middleware server to display a message informing a receipt of the fax data on a display which is connected to the home network, when the fax data is received from the external network (see discussion in claim 2).

Regarding claim 13, Edson in view of Lee, Skladman and Kimura disclose the control unit transmits a control command to the power switch through the middleware server to switch the fax machine into the off state (see discussion in claim 3).

Regarding claim 14, Edson in view of Lee, Skladman and Kimura disclose, the power switch is a power line communication module in the fax machine (see discussion in claim 4).

Regarding claim 15, Edson in view of Lee, Skladman and Kimura disclose, the power switch is an adaptor which connects a power plug of the fax machine with a jack for supplying power to the fax machine, and switches the power supply according to the control command (see discussion in claim10).

Regarding claim 16, Edson in view of Lee, Skladman and Kimura disclose, the fax data processing unit receives the fax data from an external network (Edson: Fig. 1, el. 17-19 and 15).

Regarding claim 17, Edson in view of Lee, Skladman and Kimura disclose, the fax data is received from an external network (Edson: Fig.1, el. 17-19-15).

Regarding claim 18, Edson in view of Lee, Skladman and Kimura disclose, the power switch is connected to a power plug of the fax machine (Kimura in Fig. 1 discloses an energy saving unit that turn the fax machine into ON/OFF states

Art Unit: 4178

depend on the control command Col. 7, lines 10-37 and 54-67; as previously discussed in the response to the Applicant's argument this control unit must be connected to a power switch which is connected to power plug " like any other fax machine" and a power jack communicably connected to the home network (Kimura in Fig. 1 teaches that the fax machine is connected to a telephone line "Fig. 1, el. line L; which will be "like in any fax apparatus" connected through a power jack to the home network).

Claim 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable Edson (US 6,526,581) in view of Lee (US 2003/0078990) and in view of Skladman (US 2003/0026393) and in view of Kimura (US 6,091,515) and in view of Frise (6,628,771)

Regarding claim 19, Edson in view of lee, Skladman and Kimura discloses, fax service system (Fig. 1, el. 1) comprising :

power jack, power switch, power plug and adapter(as previously discussed). Edson in view of Lee, Skladman and Kimura doesn't expressly teaches how those elements are connected to each other, the fax machine or to the home network. Frise disclose an adapter (Fig. 4) having a first end directly connected to the power jack (Fig. 4, el. 114) and a second end directly connected to the power plug (Fig. 4, el. AC IN and see Fig. 3, el. 211)

Wherein the power switch is disposed inside the adapter (Fig. 4, el. 211) and is configured to electrically connect the first end and the second end (Fig. 3)

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made, to modify Edson in view of Lee and in view of Skladman and

in view of Kimura fax system to have the elements connected in the way that Choi suggested in order to have the electrical power operate the fax machine.

Regarding claim 20, Edson in view of Lee, Skladman and Kimura discloses power switch is connected to a power plug of the fax machine and a power jack communicably connected to the home network (see explanation in claim 8).

Edson in view of Lee, Skladman and Kimura doesn't expressly teach the power switch is disposed inside an adapter configured to engage the power jack on a first end of the adapter and the power plug on a second end of the adapter.

Frise discloses, the power switch is disposed inside an adapter configured to engage the power jack on a first end of the adapter and the power plug on a second end of the adapter (see claim 19).

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made, to modify Edson in view of Lee and in view of Skladman and in view of Kimura fax system to have the elements connected in the way that Choi suggested in order to have the electrical power operate the fax machine.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 4178

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria El zoobi whose telephone number is 571-270-3434. The examiner can normally be reached on Monday-Friday (8AM-5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hai Tran can be reached on 571-272-7305. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. E./
Examiner, Art Unit 4178
/Maria El zoobi/
Examiner, Art Unit 4178

/Hai Tran/
Supervisory Patent Examiner, Art Unit 4178